the microorganism is constructed from a parent strain of the microorganism having a respiratory chain pathway of high energy efficiency and a respiratory chain pathway of low energy efficiency as respiratory chain pathways, and

the microorganism is a mutant strain or a genetic recombinant strain having either one or both of the following characteristics:

(A) the respiratory chain pathway of high energy efficiency is enhanced,

(B) the respiratory chain pathway of low energy efficiency is deficient.

2. (Twice Amended) The method according to claim 1, wherein the respiratory chain pathway of high energy efficiency is enhanced by:

increasing a copy number of a gene coding for an enzyme involved in the respiratory chain; or

modification of an expression regulatory sequence of the gene.

3. (Twice Amended) The method according to Claim 1, wherein the respiratory chain pathway of low energy efficiency is made deficient by disruption of a gene coding for an enzyme involved in the respiratory chain.

4. (Twice Amended) The method according to Claim 1, wherein an enzyme of the respiratory chain of high energy efficiency is at least one member selected from the group consisting of SoxM type oxidase, bcl complex, and NDH-1.

5. (Twice Amended) The method according to Claim 1, wherein an enzyme of the respiratory chain of low energy efficiency is at least one member selected from the group consisting of cytochrome bd type oxidase and NDH-II.

6. (Twice Amended) The method according to Claim 1, wherein the microorganism comprises enhanced SoxM type oxidase activity and deficient NDH-II activity.

7. (Twice Amended) The according to Claim 1, wherein an enzyme of the respiratory chain pathway of high energy efficiency is cytochrome bo type oxidase

B' Cont'd

8. (Twice Amended) The method according to Claim 1, wherein the microorganism is at least one member selected from the group consisting of bacterium belonging to the genus *Escherichia* and *Coryneform* bacterium.

9. (Twice Amended) The method according to Claim 1, wherein the target substance is at least one member selected from the group consisting of an L-amino acid and nucleic acid.--

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SUPPORT FOR THE AMENDMENT

The claims have been amended in a non-narrowing manner for clarity and to place the claims in proper form. Support for amendment is found in the original claims. No new matter is believed to be introduced by the above amendment and the additional claims.